

CLAIMS

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14. A method of manufacturing a retro-reflecting shell having a curved or irregular surface with the capability of reflecting light in all directions, the method comprising the steps of:

(a) mixing transparent glass or plastic pearls having a diameter between 0.01 and 0.05 mm in an adhesive transparent substance;

B2
(b) transferring said mixture to a plane sheet of transparent plastic to form a reflecting layer of pearls at least partially embedded in said adhesive transparent substance being applied to said sheet of plastic, said adhesive transparent substance being capable of adhering to said pearls as well as said plastic sheet; and

(c) subjecting said reflecting layer and said plane sheet of transparent plastic adjacent on one side thereof to vacuum forming to a shape corresponding to a curved or irregular surface.

15. A method as recited in claim 14, wherein said mixture of pearls is transferred to said plane sheet of transparent plastic by means of screen printing.

16. A method as recited in claim 14, including the step of curing said adhesive transparent substance prior to said step of vacuum forming.

17. A method as recited in claim 14, including the step of applying a layer of transparent plastic to the other side of said reflecting layer of glass or pearls, opposite to said plane sheet of transparent plastic prior to said step of vacuum forming.

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18. A method as recited in claim 14, wherein prior to said step of vacuum forming, said adhesive substance is applied as a first and a second surrounding layer surrounding said layer of pearls, said first surrounding layer being applied adjacent to said plane sheet of transparent plastic.

19. A method as recited in claim 18, wherein said pearls in said reflecting layer form a monolayer.

20. A method as recited in claim 14, wherein said transparent plastic comprises polyvinyl chloride or polyester.

21. A method as recited in claim 14, wherein said layer of transparent plastic comprises polyvinyl chloride and said

transparent plastic layer is high-frequency welded to said reflecting layer.

22. A method as recited in claim 14, wherein said adhesive transparent substance is a lacquer.

23. A method as recited in claim 18 wherein said lacquer is a type of lacquer capable for use in screen printing.

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24. A method as recited in claim 14, including the step of applying a high gloss material layer adjacent to said second surrounding layer of adhesive substance opposite to said reflecting layer of pearls prior to said step of vacuum forming.

25. A method as in claim 14, including the step of applying a layer of transparent dye adjacent to said plane sheet of transparent plastic prior to said step of vacuum forming.

26. A method as recited in claim 18, wherein said high gloss material layer comprises aluminum particles.